

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/762,039 02/01/01 KIM

S 49320

EXAMINER

HM12/1010

KEIL & WEINKAUF
1101 CONNECTICUT AVENUE NW
WASHINGTON DC 20036

FUBARA, B

ART UNIT

PAPER NUMBER

1615

DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.

09/762,039

Applicant(s)

KIM ET AL.

Examiner

Blessing M. Fubara

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____.

DETAILED ACTION

Examiner acknowledges receipt of paper number 3 filed 2/01/01.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Straub et al. (EP 0 100 890).

Straub teaches a copolymer obtained by free radical copolymerization of an alkyl acrylate or methacrylate, water-soluble neutral nitrogen containing monomer, cation-group containing monomer and a 3 or 4 carbon unsaturated carboxylic acid. The polymer is obtained by free-radical copolymerization of 20-75% ethyl, n-butyl, tert-butyl or lauryl acrylate or methacrylate or mixtures thereof, 5-50% N-vinylpyrrolidone, n-vinylcaprolactam or mixture thereof, 1-25% n-vinylimidazole, 1-vinyl-2-methylimidazole or mixtures thereof and 1-25% of acrylic acid or methacrylic acid. The polymer has a K value of from 12-75 when measured in ethanol at 25 °C. The polymeric composition of Straub finds utility in hair sprays, fixatives, and auxiliaries in shampoos and setting compositions. See abstract.

The claimed ranges lie inside the ranges taught in the prior art. And where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. Therefore it is prima facie obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Straub. One having ordinary skill in the art would

Art Unit: 1615

have been motivated to prepare the cationic polymeric composition of Straub. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potthoff-Karl et al (US 5,132,417).

Potthoff-Karl teaches a copolymer or tert butyl acrylate and/or tert-butyl methacrylate obtained by free radical polymerization of from 20-90% tert-butyl acrylate and /or tert-butyl methacrylate, from 10-60% N-vinylpyrrolidone and from 0-30% C1-C20- alkyl acrylate, C1-C20 alkyl methacrylate, a C2-C4-hydroxyalkyl methacrylate or vinyl acetate or mixtures thereof (abstract).

The claimed ranges lie inside the ranges taught in the prior art. And where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. Therefore it is prima facie obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Potthoff-Karl. One having ordinary skill in the art would have been motivated to prepare the cationic polymeric composition of Potthoff-Karl. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

4. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is 703-308-8374. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 703-308-2927. The fax phone numbers for the

Application/Control Number: 09/762,039


Page 4

Art Unit: 1615

organization where this application or proceeding is assigned are 703-305-3592 for regular communications and 703-305-3592 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Blessing Fubara
October 6, 2001


THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600